REMARKS

Claims 15-42 were examined in the Office Action mailed October 31, 2008, with claims 1-14 having been canceled in the Preliminary Amendment filed January 9, 2006.

The following objections and rejections are currently pending:

- The drawings stand objected to for failure to illustrate at least one of radially outer and radially inner cooling channels being oriented at an angle of slope $\beta \leq 30$ degrees with respect to their radial lines (claim 24).
- Claims 15, 31 and 37 stand rejected under 35 U.S.C. § 102(b) as anticipated by European Patent publication No. EP 0 557 603 A1 ("EP '603").
- Claims 15-42 stand rejected under 35 U.S.C. § 103(a) as unpatentable over EP '603 in view of U.S. Patent No. 3,730,304 to Buyze (Buyze") and U.S. Patent No. 5,526,905 to Shimazu, *et al.* ("Shimazu").

The Applicants have amended independent claims 15, 31 and 37 to further recite features of the present invention. As noted in original Specification ¶ [0018], the cooling channels are formed between arched-shaped features formed, for example, by metal working. These features are now recited as: "the cooling channels formed between closed surface features formed from the fan plate." In addition, the claims have been amended to incorporate dependent limitations defining the relationship between the geometry of the inner and outer cooling channels.

1. The Drawing Objection. The Applicants are requesting Examiner approval of new Fig. 8 illustrating the cooling channel angular relationships. The Applicants respectfully submit that no new matter is added, as this feature is disclosed in the original Specification at ¶ [0016]. Further, the Applicants note that new Fig. 8 was also originally disclosed in one of the German patent

applications to which priority is claimed, DE 103 01 707.0 as Fig. 7. Corresponding amendments to the Specification to correct the citation to Fig. 7 (former ¶ [0041]) and change the reference ¶ [0042] from Fig. 7 to Fig. 8 are also made. Approval of the new figure and withdrawal of the pending drawing objection is respectfully requested.

2. <u>The Claims Are Patentable Over the Cited References</u>. The Applicants respectfully traverse the rejections based on the EP '603 reference, on the ground that this reference does not disclose all of the features of the invention recited in the pending claims.

As a first matter, as shown in Figs. 1 and 2 of the EP '603 reference[1], the blades 17 are separate plate structures which are mounted on the flat face of the fan disc 15, where "[s]aid mounting is preferably carried out by means of a thermally conductive adhesive." The EP '603 reference therefore does not teach or suggest the recited feature of "<u>the cooling channels formed between closed surface features formed from the fan plate</u>."

The EP '603 reference also teaches the use of the same blades 17 in all positions on fan disc 15. This reference therefore does not teach or suggest the claimed arrangements in which the "closed ached surface features" are formed

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[1] The English translation of the Abstract of the EP '603 application is as follows: "In the case of a torsional vibration damper, especially a viscosity torsional vibration damper, vibration energy is converted into heat which is emitted to the surrounding air. In order to increase the performance capability of the torsional vibration damper by means of improved heat transfer, fan blades (17) are arranged on at least one of the flat surfaces of the damper housing (1). The fan blades (17) are preferably constructed on a fan disc (15) which is mounted on at least one of the flat surfaces of the damper housing (1). Said mounting is preferably carried out by means of a thermally conductive adhesive."

with "a ratio c_a between a radial length l and a width b of the radially outer cooling channels is greater than a ratio c_i of the radially inner cooling channels."

For their part, the Buyze and Shimazu references fail to cure the deficiencies of the EP '603 reference. Indeed, these references are non-analogous art. Both of these references disclose *internal* brake disk ventilation arrangements – Buyze discloses u-shaped spacers attached to the inner surfaces of a pair of brake disk rings; Shimazu similarly discloses ventilation vanes between a pair of brake disk rings. At most, these disk separating ridges teach how to route air radially outward through closed channels; they do not teach anything regarding the control of air flow across the surface of a fan disk, let alone teach anything regarding the presently claimed closed arched surface arrangements.

The Applicants submit that the cited references do not teach or suggest all of the features of the present invention, and therefore the pending claims are patentable over the EP '603, Buyze and Shimazu references. Accordingly, reconsideration and withdrawal of the pending § 102(b) and § 103(a) rejections.

CONCLUSION

In view of the foregoing, the Applicants submit that claims 15, 17-31, 33-37 and 39-42 are in condition for allowance. Early and favorable consideration and issuance of a Notice of Allowance for these claims is respectfully requested.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket # 100729.56218US).

Respectfully submitted,

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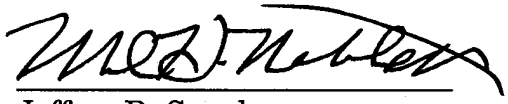

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